

2J7D83B-RB-SP

5GNR Screw Mount

Key Features

Cable 1: 5GNR

- 617-960 MHz
- 1427-2690 MHz
- 3300-5000 MHz
- 5150-5925 MHz

Screw Mount

Anti-Rotation

Ground Plane Dependent

Customizable Cable and Connector

Dimensions $\varnothing 54 \times 91$ mm

Certificates: IP67, IP69



1. Antenna and electrical specifications

Cable 1

Parameters	5G NR Antenna			
Technologies	5G, 4G, 3G and 2G			
Standards	5G NR/4GLTE/FirstNet/CBRS/LPWA/CAT-X/CAT-Mx/CAT-NBx/NB-IoT/3G/2G			
Frequency (MHz)	617-960	1427-2690	3300-5000	5150-5925
Band (MHz)	600, 700, 850, 900	1500, 1600, 1700, 1800, 1900, 2000, 2100, 2300, 2500, 2600	3300, 3500, 3600, 3700, 4500	5200, 5500, 5800
5G NR Bands	n5, n8, 12, n20, n28, n71, n81, n82, n83,	n1, n2, n3, n7, n25, n34, n38, n39, n40, n41, n50, n51, n66, n70, n74, n75, n76, n80, n84, n86	n77, n78, n79	
4GLTE Bands	B5, B6, B8, B12, B13, B14, B17, B18, B19, B20, B26, B27, B28, B29, B44, B67, B68, B71, B85	B1, B2, B3, B4, B7, B9, B10, B11, B21, B23, B24, B25, B30, B32, B33, B34, B35, B36, B37, B38, B39, B40, B41, B45, B50, B51, B65, B66, B69, B70, B74, B75, B76	B22, B42, B43, B48, B49, B52	B46, B47, B252, B255
3GCELL Bands	B5, B6, B8, B12, B13, B14, B19, B20, B26	B1, B2, B3, B4, B7, B9, B10, B11, B21, B25, B32, B33, B34, B35, B36, B37, B38, B39, B40	B22	
2GCELL Bands	710, 750, 810T, 850, 900P, 900E, 900R	1800DCS, 1900PCS		
CDMA CELL Bands	BC0, BC2, BC3, BC7, BC9, BC10, BC12, BC18, BC19	BC1, BC4, BC6, BC8, BC13, BC14, BC15, BC16, BC20, BC21		
Return Loss (dB)	~-12.4	~-14.6	~-14.1	~-11.6
VSWR	~1.7:1	~1.6:1	~1.6:1	~1.8:1
Efficiency (%)	~70.0	~52.5	~36.5	~26.5
Peak Gain (dBi)	~2.0	~2.8	~2.8	~0.8
Average Gain (dB)	~-1.6	~-2.8	~-4.4	~-5.8
Impedance (Ohm)	50			
Polarisation	Linear			
Radiation Pattern	Omni-Directional			
Max. Input Power (W)	25			
Connector Type	SMA-Male Standard (Other Connectors Available)			
Cable Length	300 cm Standard (Any Cable Length Available)			
Cable Type	LL100 Standard (Other Cables Available)			

Antenna Measurement Conditions:

Mounted on 30 x 30 cm Ground Plane

100 cm of Cable LL100

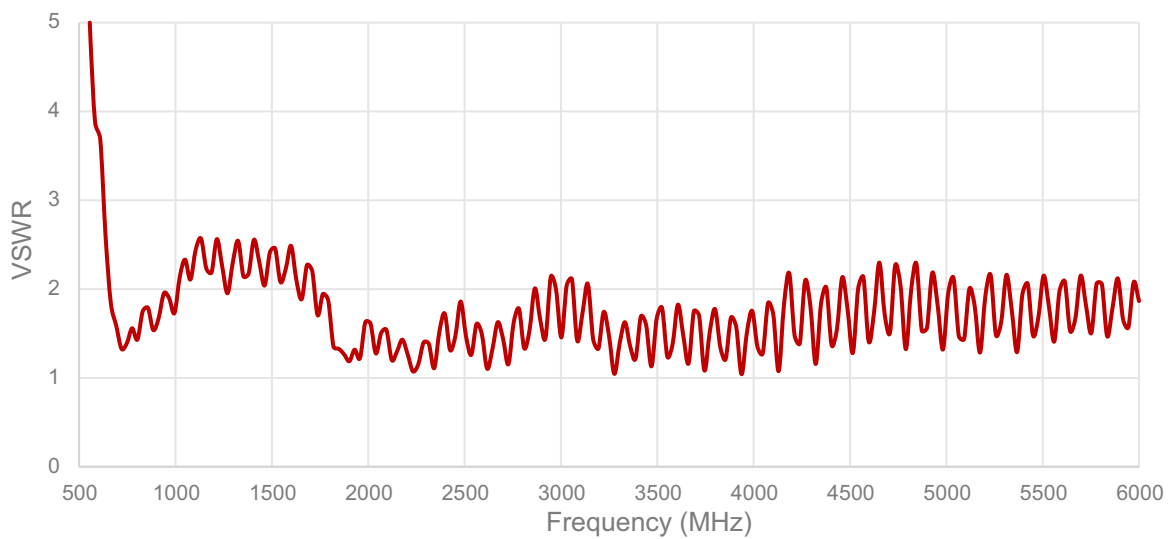
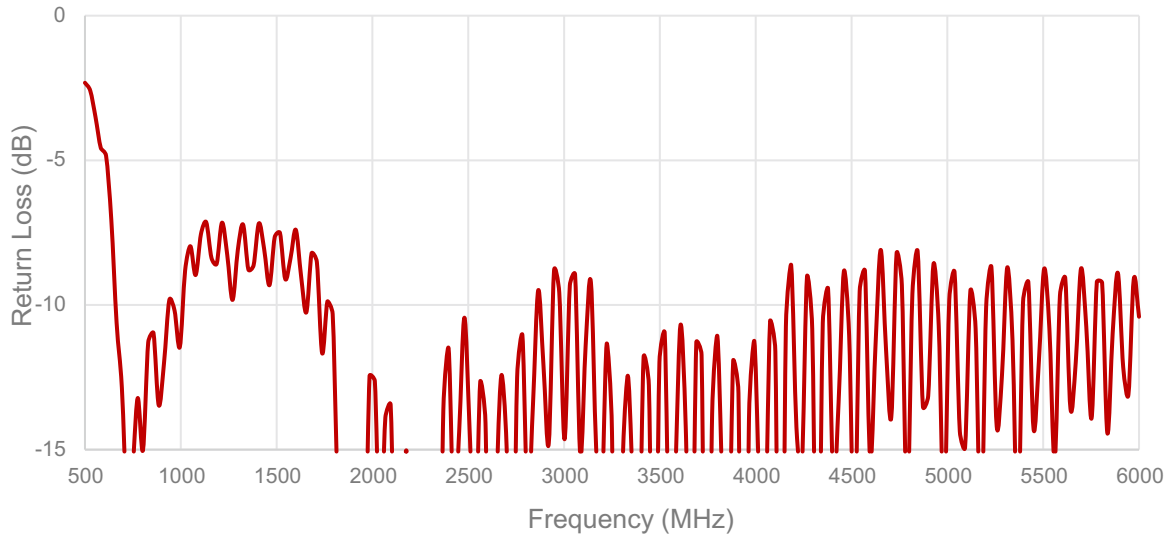
Measured in Certified CTIA 3D Anechoic Chamber

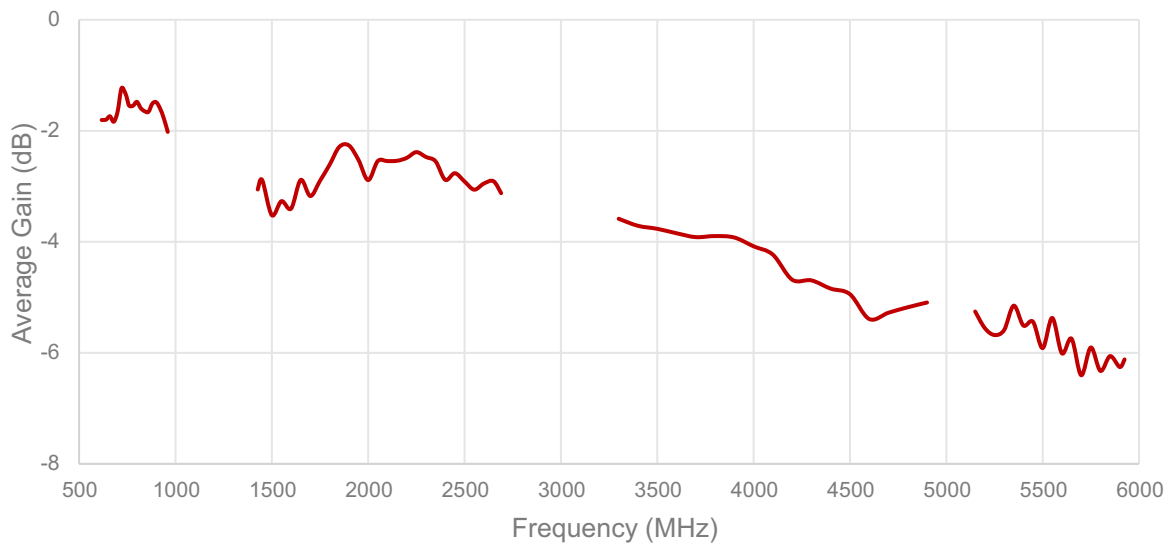
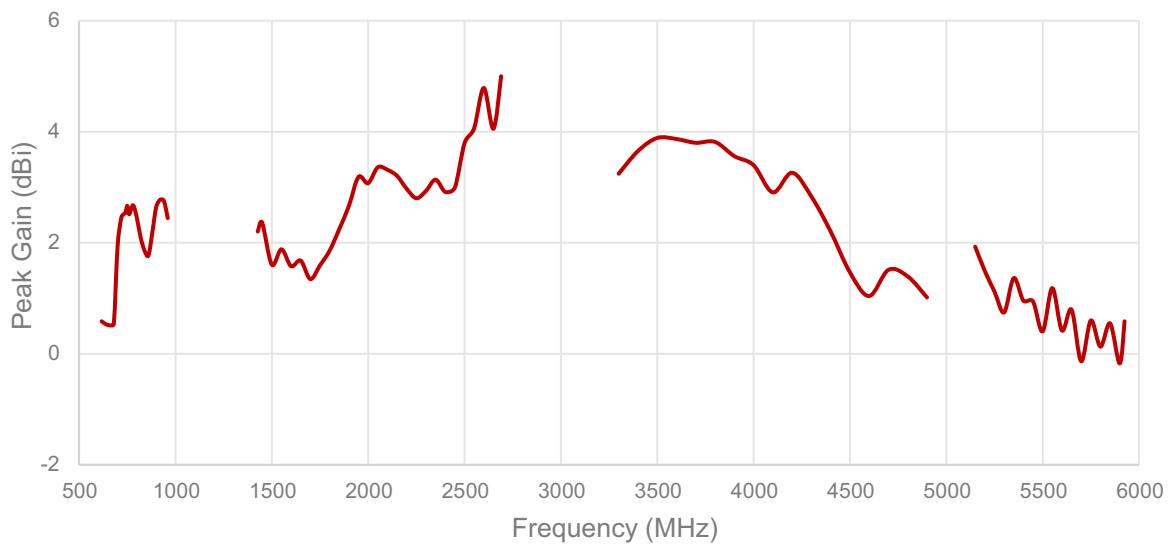
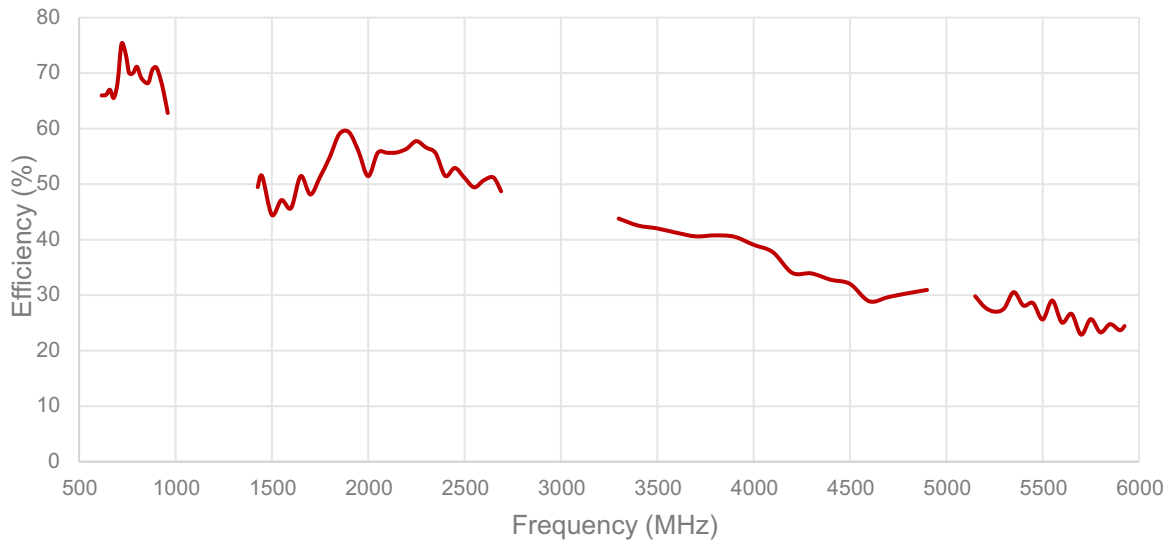
2. Mechanical and environmental specifications

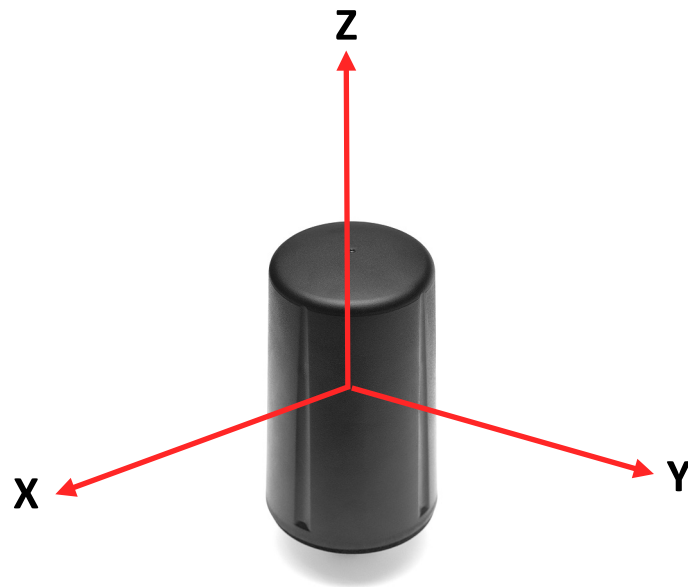
Specifications	2J7D83B-RB-SP
Mounting Type	Screw Mount
Dimensions (mm)	Ø 54 × 91
Rec. Tighten Torque (Nm)	6 Nm
Radome Type	ASA
Radome Color	Black
Antenna Base	Zamak
Operating Temperature (C)	-40 to +85
Storage Temperature (C)	-40 to +85
Substance Compliance	RoHS
Certificates	IP67, IP69

3. Antenna parameters

Cable 1: 5GNR

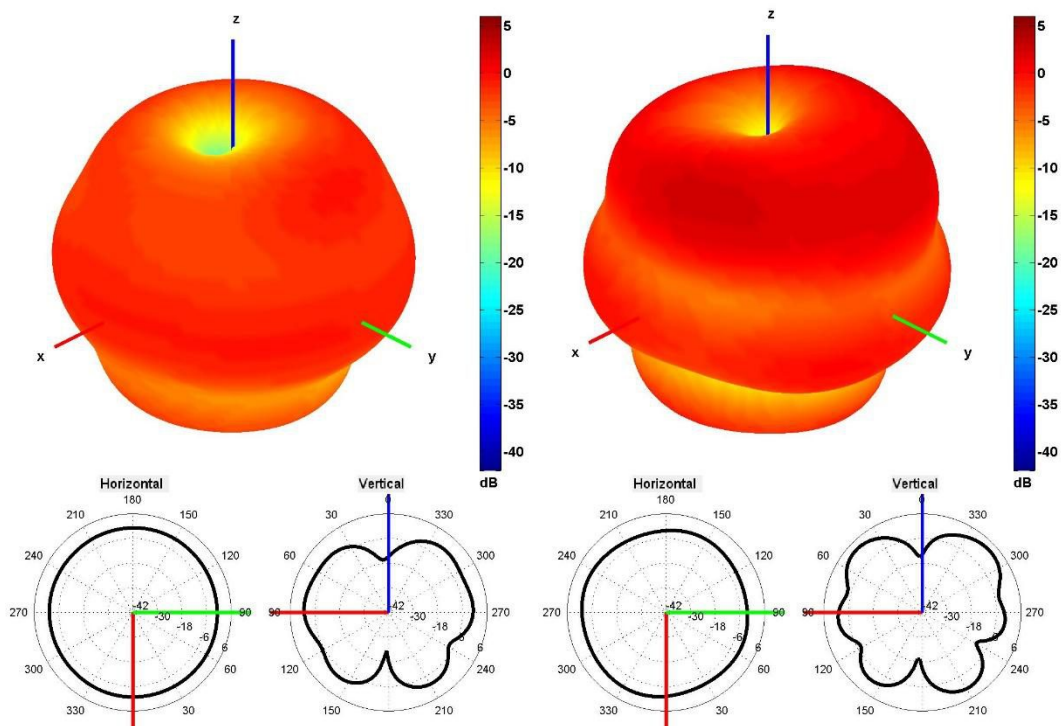




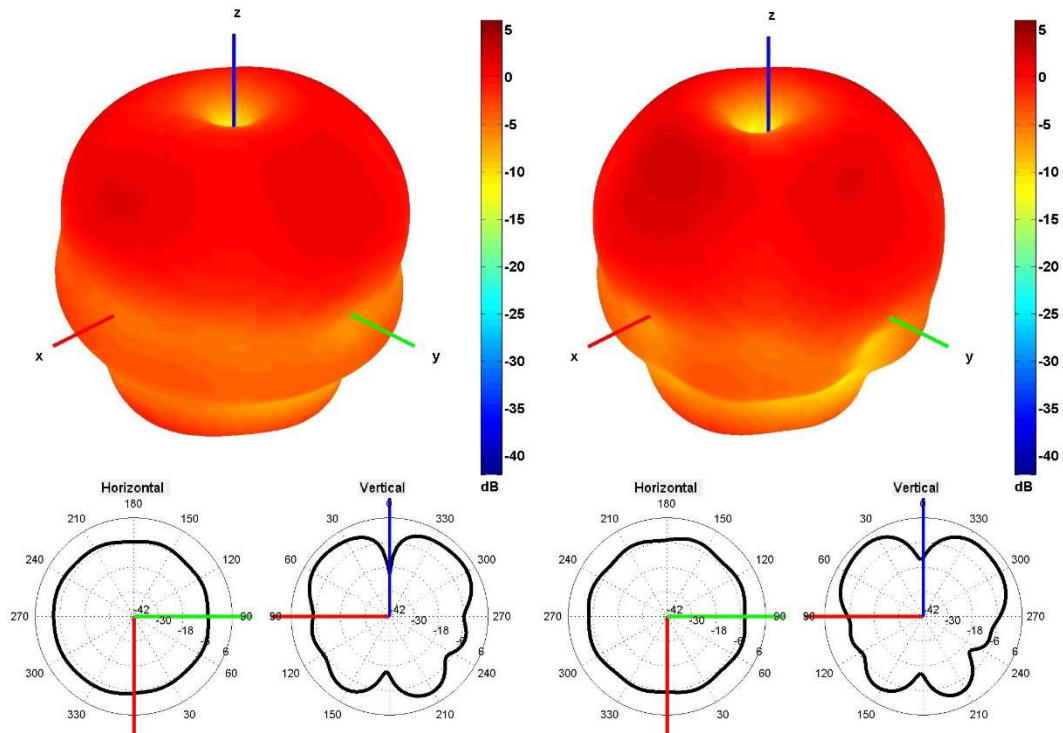


Radiation pattern reference

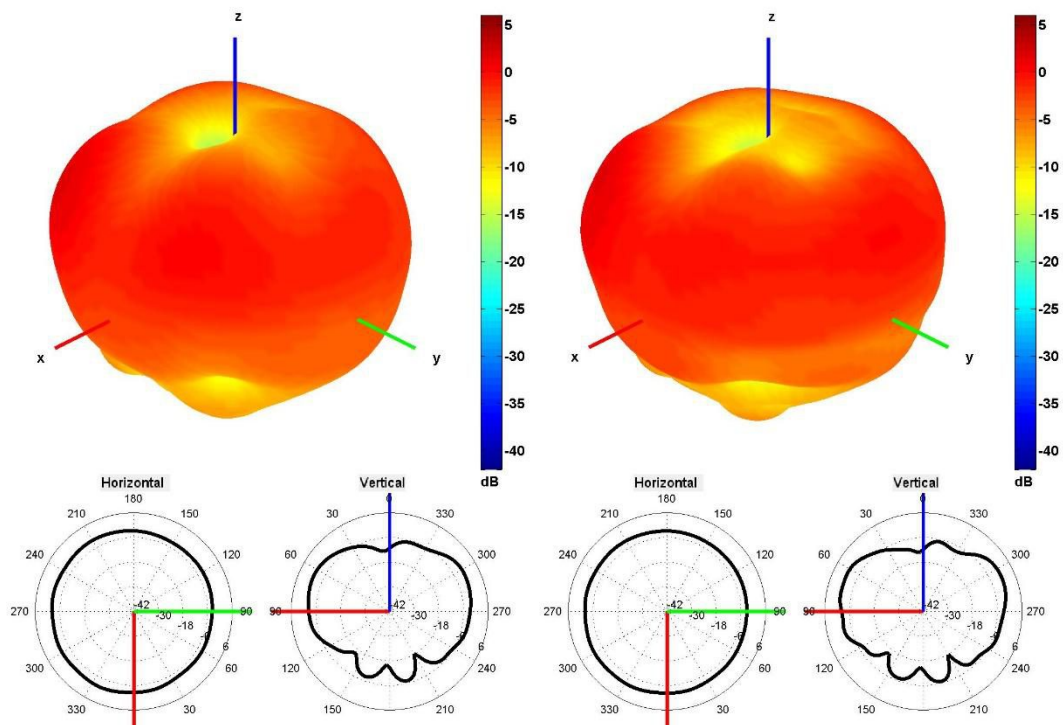
Cable 1: 5GNR



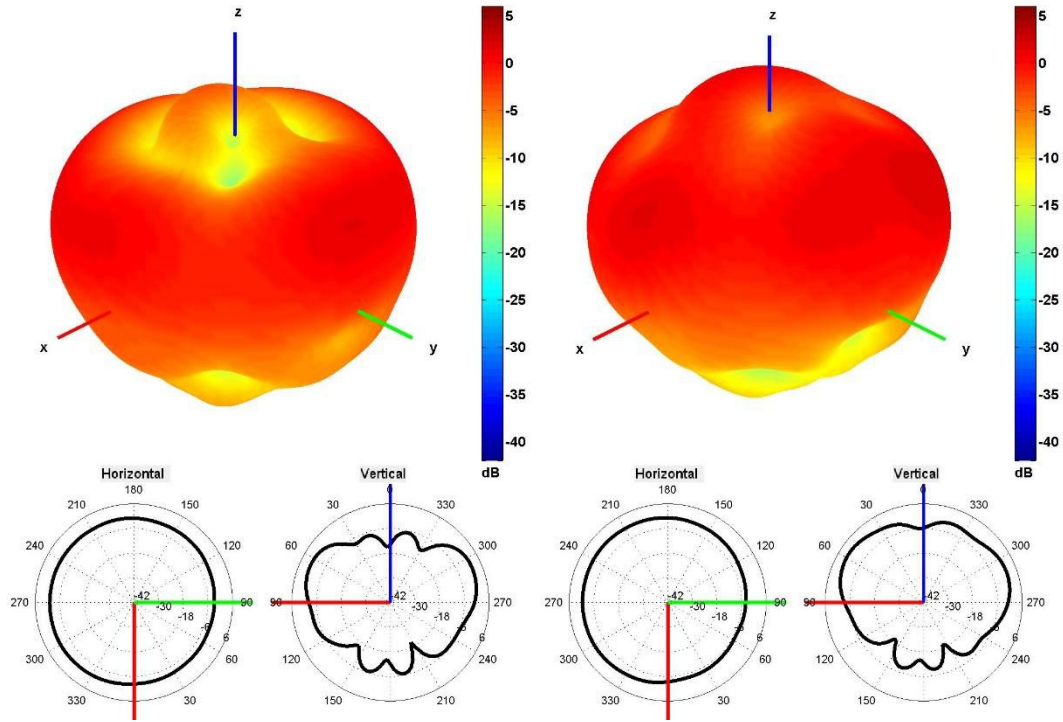
640 and 740 MHz Radiation pattern



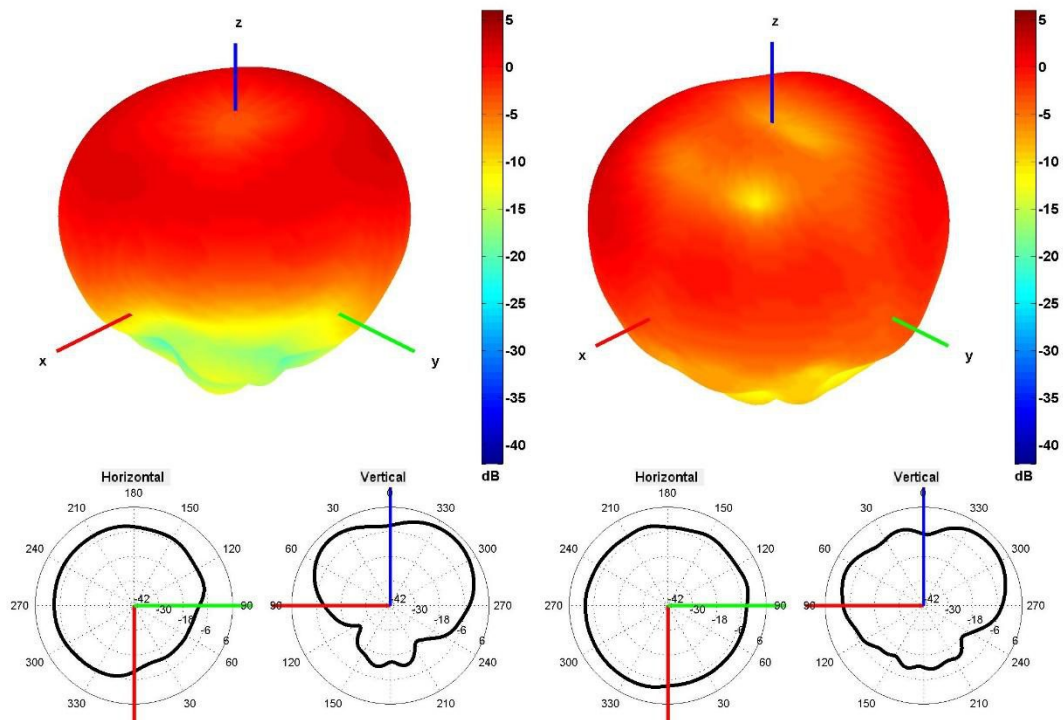
840 and 940 MHz Radiation pattern



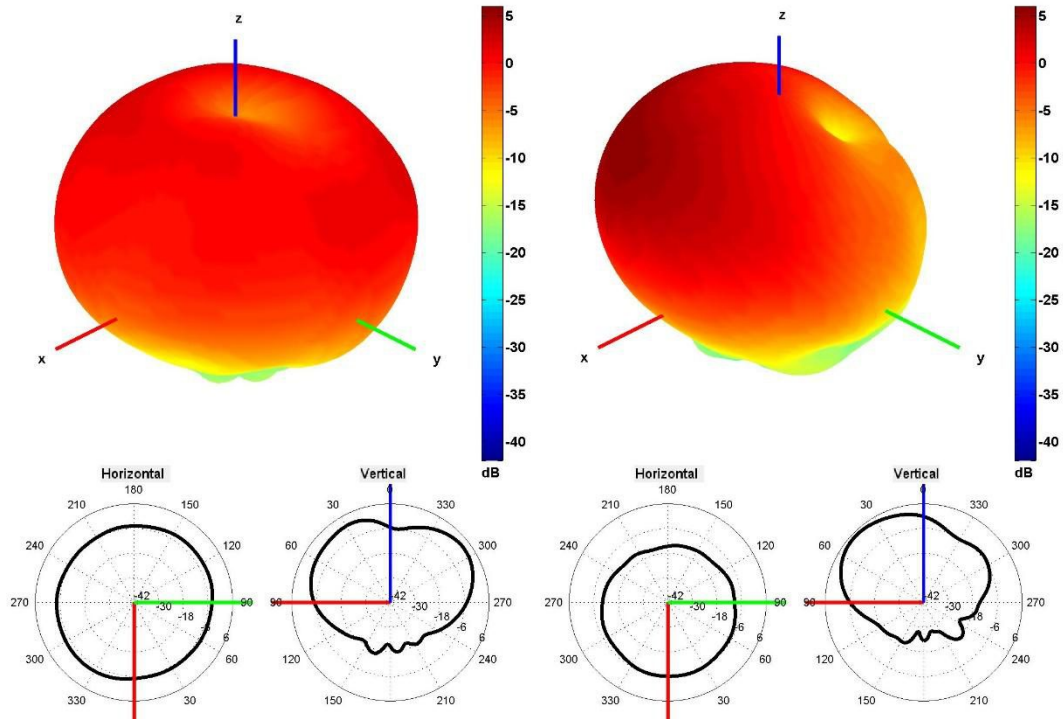
1500 and 1600 MHz Radiation pattern



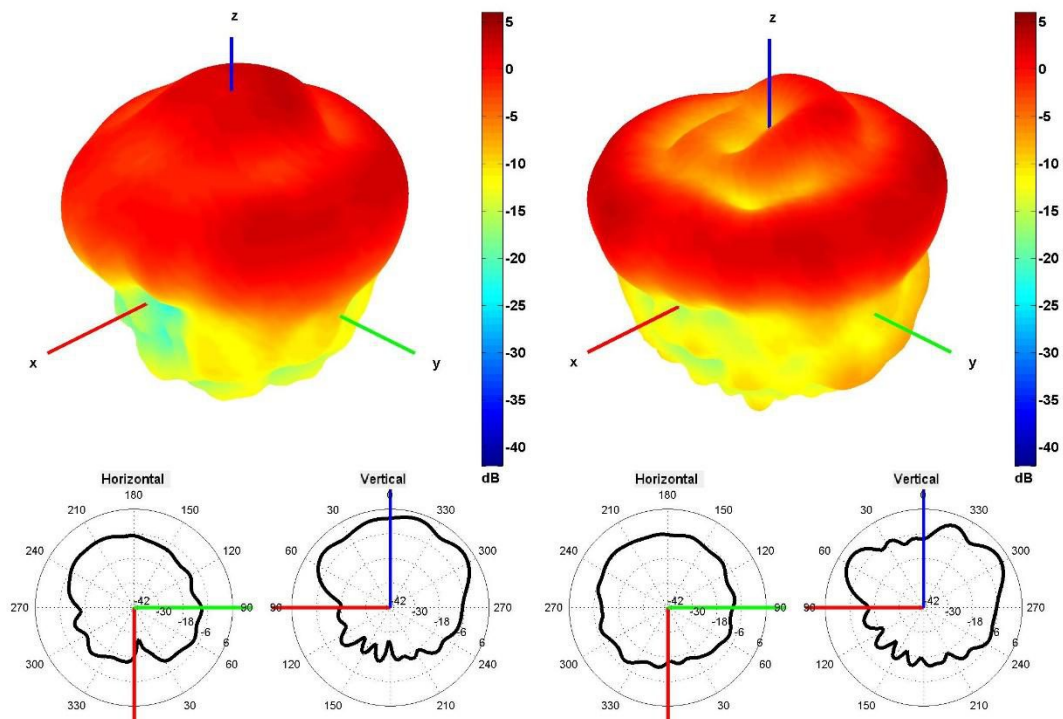
1750 and 1830 MHz Radiation pattern



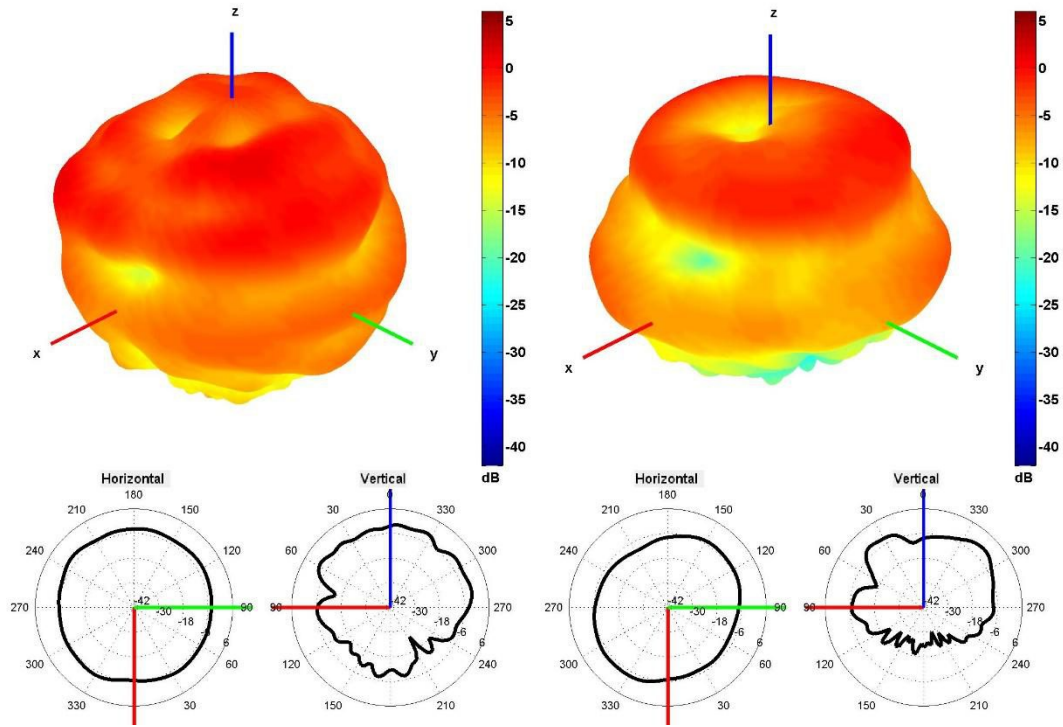
1950 and 2070 MHz Radiation pattern



2350 and 2600 MHz Radiation pattern

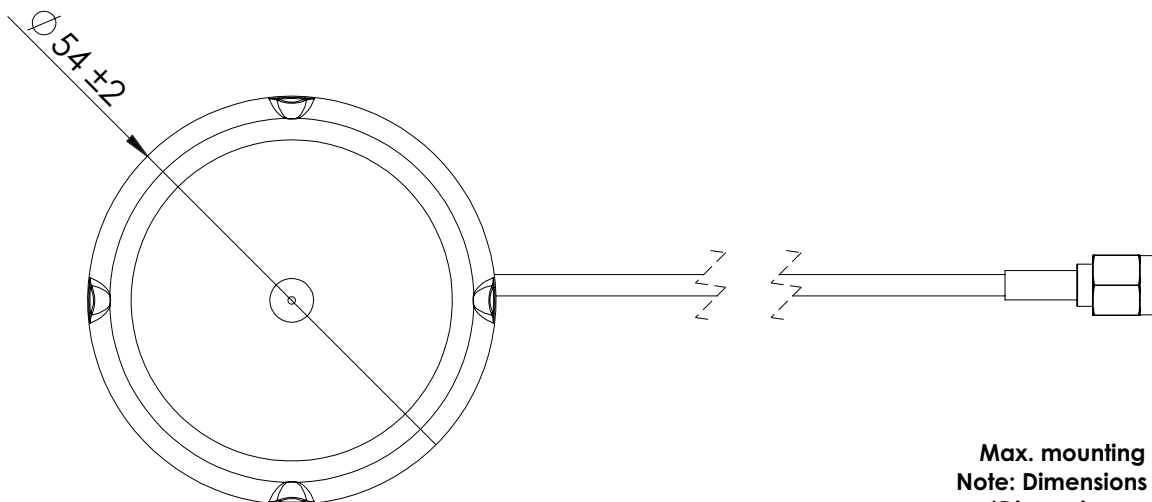
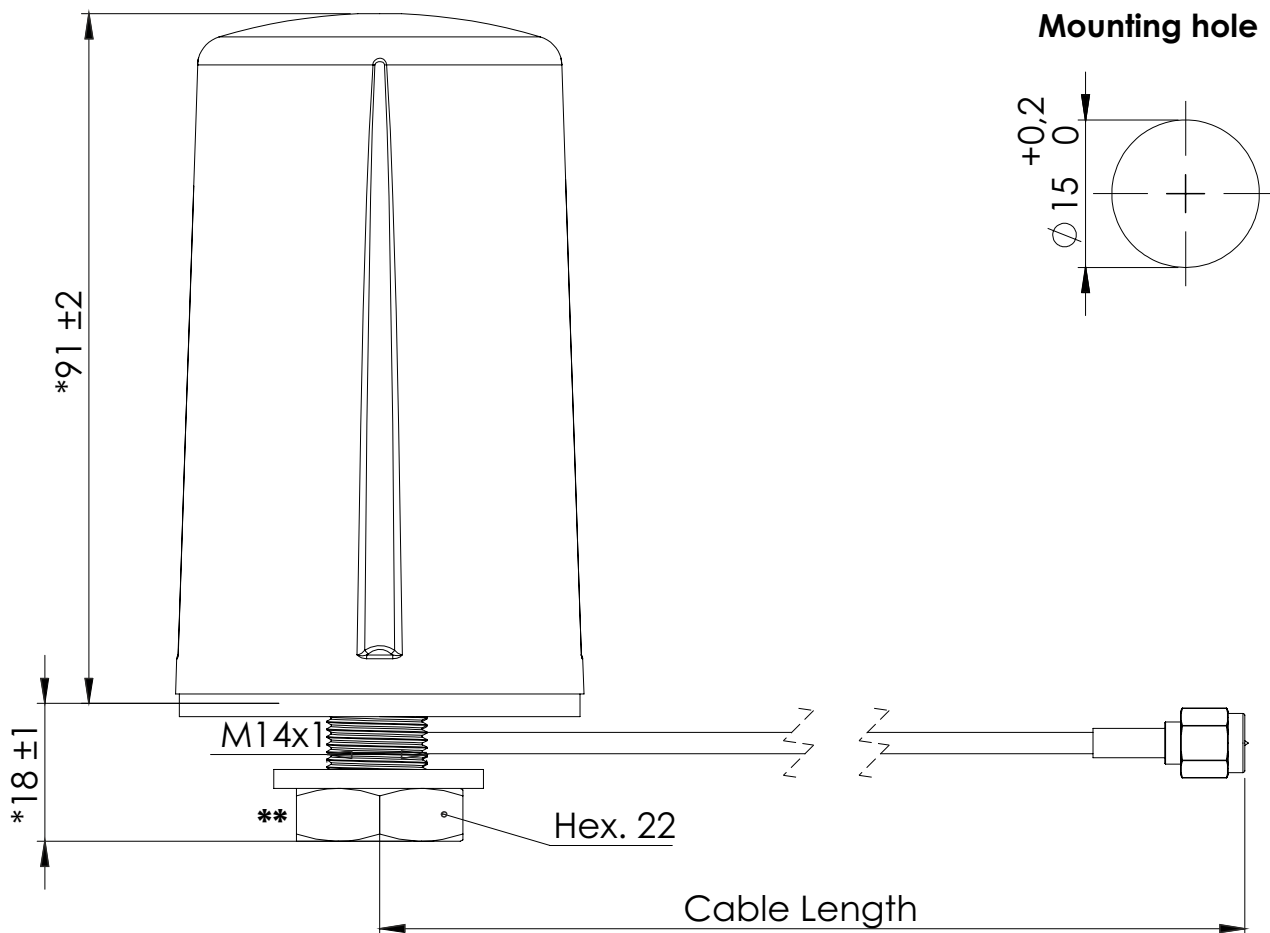


3350 and 3600 MHz Radiation pattern



4500 and 5500 MHz Radiation pattern

4. Antenna drawings



Max. mounting thickness 4.5mm
Note: Dimensions are in millimeters
*Dimensions are after mounting
**Rec. Torque= 6 Nm

5. Antenna Images

